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TOWARD CLEANER WATER IN THE PACIFIC NORTHWEST AND ALASKA

Environmental Protection Agency
Seattle, Washington

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Toward Cleaner Water in the Pacific Northwest & Alaska

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The National Water Permit Program
How it's working—How you can help

Region X – U.S. Environmental Protection Agency

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This report presents an evaluation and explanation of the National Pollutant Discharge Elimination System(NPDES) as it operates in Region X of the Environmental Protection Agency. It describes the complementary roles of state and federal government, and outlines the part which the general public plays. Written for a lay audience.

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What's it all about?

What is the National Water Permit Program? Officially, it has the title of National Pollutant Discharge Elimination System. NPDES. But let's call it the Permit Program. It means simply —no discharge of any pollutant into any of the Nation's waters is allowed without a permit spelling out terms and corrective timetables to be followed.

The Permit Program is part of the Federal Water Pollution Control Act Amendments which became Public Law on October 18, 1972. It is the national goal of the Act that the discharge of pollutants into navigable waters be eliminated by 1985. Congress set two interim dates of July 1, 1977 and July 1, 1983, by which different levels of waste treatmen' are to be reached.

The Permit Program is the muscle for us who live in the Region X area of Alaska, Idaho, Oregon and Washington and the rest of the United States. The muscle is administered for us by the U.S. Environmental Protection Agency (EPA) and the separate state environmental agencies. (Nationally, only about half the states had federally approved Permit Programs as of July 1975.)

There are only 6,500,000 of us living in these four states and the 833,000 square miles they cover. But why the Permit Program is so important to us is that we have 7,157 miles of coastline and 38,340 miles of shoreline in our area. Not to mention the thousands of lakes, rivers and streams. Fortunately, there are not many of us, but there's a lot of water to protect. Unfortunately, there have been and still are polluters. Some have been stopped, most are attempting to meet federal and state effluent standards with the deadlines and a few are resisting the state/federal attempts to clean up waters still being polluted.

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Who's doing the job?

In Oregon and Washington, with their respective Department of Environmental Quality and Department of Ecology, Permit Programs already were in effect and received EPA approval. In Idaho, the Department of Health and Welfare is that state's agency on environment and in Alaska, it's the Department of Environmental Conservation. EPA works with the latter two state agencies in administering the Permit Program.

The U.S. Environmental Protection Agency, with its approximate staff of 250 for Region X, including EPA operations offices in the individual states, completes the "official" team. The rest of the team is made up of concerned citizenry—you.

Even before the Water Pollution Control Act and its accompanying Permit Program became law, there were and still are nearly 500,000 residents in the four states of Region X affiliated with 150 environmental organizations. That's nearly 12 per cent of the four-state population.

The official team is a mix of scientists, engineers, technicians, lawyers and administrative staff. They are supported by the various research laboratories of the states and EPA's national laboratory in Corvallis, Oregon; a major laboratory in the Puget Sound Basin scheduled for construction in Manchester; the Arctic Environmental Research Laboratory in Fairbanks, Alaska, and EPA national laboratories in Cincinnati and in North Carolina.

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What's been done?

Since the inception of the Federal Permit Program in 1972, approximately 2,500 permits have been issued to industrial, municipal and federal facilities throughout the four states. That figure represents virtually every potential polluter in existence in Region X through June 30, 1975.

Virtually all major facilities, such as pulp and paper manufacturers or large city waste-water treatment plants, have been permitted. Nearly all these major facilities, which number approximately 110 each, industrial and municipal, have achieved or are on a schedule of compliance to meet federal and state limits of effluent discharge by July 1, 1977.

Permits issued to industrial, federal or municipal facilities which discharge small amounts of pollutants into public waters, such as a fish hatchery, forest service recreational area or small-town sewer system, are classified as minor permitees. However, they are under the same compliance mandates as are the major permitees. No permit (first generation) shall exceed a term of five years, according to the law. They will be reviewed against new data bases before a second generation permit is issued.

Sewage treatment and disposal is a problem familiar to all of us and it is in this phase of cleaning up our waters where the federal government is spending billions of dollars to help cities and towns build new plants or upgrade existing ones.

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Some specific results

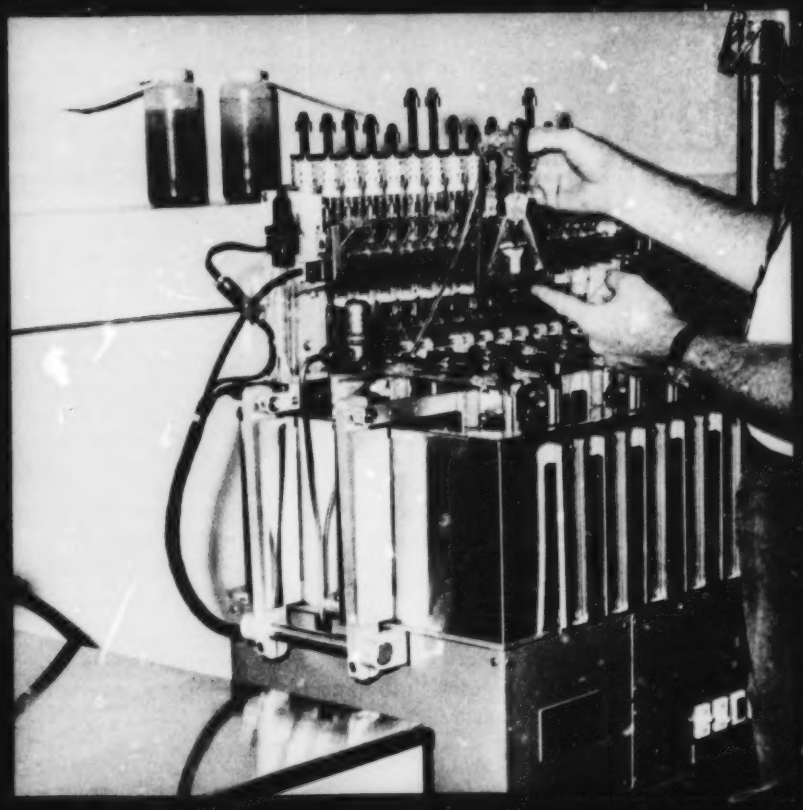
The 36 pulp mills in Region X have been long-time polluters of the area waters. In 1974, they dumped 3,120,000 pounds of Biochemical Oxygen Demand (BOD) pollutants daily. Add to that another 1,010,000 pounds of suspended solid wastes. BOD depletes the oxygen supply so vital to plant and aquatic life in the receiving waters. By 1977, these BOD discharges are scheduled to be reduced by nearly 85 per cent, to 476,000 pounds; the suspended solids will be reduced by 63 per cent, to 638,000 pounds.

An example of how one mill will help in diminishing pollutants is taking place on the Columbia River at Longview, Washington. The plant produces chlorine for bleaching its pulp. The process utilizes mercury, a known toxic metal that seriously affects all aquatic organisms. By completely changing its chlorine manufacturing process, the company is eliminating discharge of mercury and reducing its total effluent flow by one-third.

A pulp mill at Coos Bay, Oregon, was ordered on permit compliance schedule to eliminate a seepage of waste liquors which was damaging tidal waters along an adjacent stretch of Pacific Ocean beach. The permit was issued by Oregon's environmental agency and approved by the EPA.

In Kodiak, Alaska's largest seafood processing center, plant wastes were having a devastating impact on the harbor. Permit requirements forced alternative disposal methods which halted dumping of wastes and created a new industry—fish meal processing.

For years, feedlot installations have been a major source of pollution in Idaho. The Permit Program placed feedlots on time schedules to provide facilities to eliminate discharges of pollutants. Approximately one-half of the 63 feedlots permitted have control facilities inplace, the other half scheduled for completion by October, 1975.



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What's it costing? How much more to be done?

In the 20 years 1952-72, Region X communities invested $600 million for sewerage facilities. Replacement value, as of January 1973, was $1.5 billion. Financing was arranged for another $145 million during 1973 and 1974. But in response to a 1974 federal survey, Region X states and communities indicated a need to invest another $4.4 to $8.2 billion by 1983.

Although the federal government is and will bear 75 per cent of these capital investments ($231 million allotted from 1973 through fiscal 1975; another $226 million for fiscal 1976 alone), the states, the communities, the taxpayers, must pick up the balance. The annual cost of maintenance and operation of sewerage facilities—currently $180 million and expected to rise to $1.1 billion annually by 1983—will be borne entirely by the taxpayer.

Industrial costs are not so well defined. However, a 1972 EPA assessment indicated Region X industries would have to spend $1 billion for capital investment in waste treatment facilities and $250 million annually for operation and maintenance. Fifty-four per cent of those amounts would be borne by the pulp and paper industry. (Nationally, pulp and paper manufacturers account for 17 per cent of total sewerage investment requirements.)

For some industries, such as silviculture (development, reproduction and care of forest trees), mining and agriculture, data is only now being compiled to establish guidelines for pollution control through issuance of permits.

Although some industry may be granted extended periods of time to meet federal standards of pollutant discharge, they must stay on a compliance schedule. State and/or EPA staffs include field investigation units to monitor performance of the permittees and to gather new data. Should there be evidence of non-compliance, the enforcement division issues documented notices of violation. Willful or negligence violations can bring fines of up to $25,000 to $50,000 a day and one to two years imprisonment.

How you can help

Requirements written into the Permit Program law give the public an unprecedented opportunity to take part in a government regulatory program. The public involvement opportunities give us full access to all information (except trade secrets) on proposed discharges of pollutants. The law gives citizens who care enough to take part, a chance to evaluate the information and to make their views known.

As stated earlier in this writing, nearly all industrial, municipal, state and federal facilities which discharge pollutants were under permit control by July, 1975. However, after a permit has been issued, it is a public document; you can learn exactly what a discharger may put into a water body and what the discharger must do to reduce or eliminate the flow of pollutants. And you have access to the monitoring and compliance reports that dischargers must file with EPA or the state agency. Citizens can use those reports to measure progress—or lack of it—toward cleaner water.

Going still further, you, under the law, have the right to file suit against anyone violating a permit condition, an EPA or state order. In fact, you can file suit against EPA itself if it fails to carry out any action required by the 1972 law.

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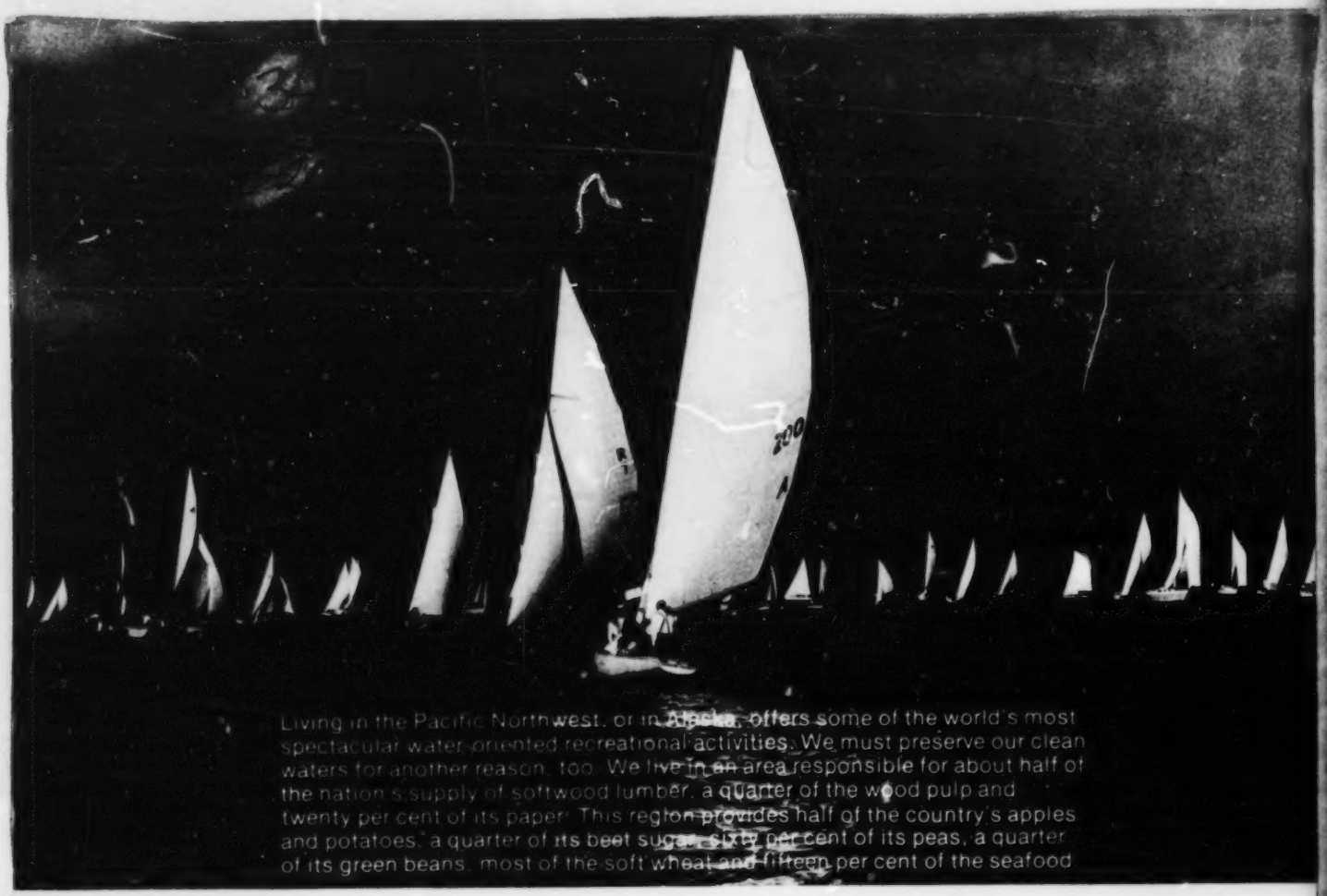

Living in the Pacific Northwest, or in Alaska, offers some of the world's most spectacular water-oriented recreational activities. We must preserve our clean waters for another reason, too. We live in an area responsible for about half of the nation's supply of softwood lumber, a quarter of the wood pulp and twenty per cent of its paper. This region provides half of the country's apples and potatoes, a quarter of its beet sugar, sixty per cent of its peas, a quarter of its green beans, most of the soft wheat and fifteen per cent of the seafood.

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